UDRIVE

European Naturalistic Driving Study

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Executive Summary

D32.1 “Participant recruitment procedures” is a public deliverable which describes the recruitment strategy of each Operation Site (OS).

Participant recruitment falls within the scope of SP3 “Data collection” under the guidance of ERTICO. The deliverable provides recruitment guidelines and strategies for work in UDRIVE work package (WP) 3.2 “Operation site preparation and adaptation”.

This Deliverable addresses the following topics:

- Recruitment procedures
- Preconditions for recruitment
- Recruitment methods
- Practical implementation at each OS

General pre-requisites for recruitment, guidelines and input from other work packages necessary for recruitment are described. Furthermore, possible channels to reach the target group were specified. However, the focus is on the planned practical implementation at each OS as an important milestone for OS preparation.

Finally conclusions are drawn including issues that may arise concerning the next Go/No go decision and further input needed from other work packages .

Table of contents

1 Introduction

1.1 The UDRIVE project

UDRIVE is the first large-scale European Naturalistic Driving (ND) Study on cars, trucks and powered-two wheelers. Driving and Riding data will be collected in seven European countries including Austria, France, Germany, Poland, The Netherlands, Spain and UK.

Naturalistic Driving is a research method/approach undertaken to provide insight into driver behaviour during everyday trips by recording details on the driver, the vehicle and the surroundings through unobstrusive data gathering equipment and without experimental control.

During an almost two-year data collection effort, UDRIVE will collect information from 210 vehicles, each for up to 21 months: 200 passenger car drivers, 50 truck drivers and 40 powered two-wheelers. All data, including video data showing the forward view and the view of the driver as well as GIS data, will be collected continuously to enable knowledge in the various research areas to be brought well beyond the current state of the art.

The goal is to build one central database with the collected ND data and to perform targeted analyses in the areas of:

- Crash causation factors and associated risks
- Distraction and inattention
- Vulnerable road users
- Eco-Driving

The UDRIVE consortium consists of 19 partners and represents a good balance between different EU regions and various stakeholders. The consortium also represents a good balance with regard to expertise in the various research areas and expertise in huge data acquisition and storage.

1.2 Background and aims of this Deliverable

Finding appropriate test subjects is a major challenge. 290 participants in 7 countries have to be recruited. The aim of this deliverable is to prepare the recruiting process and to define strategies at each Operation Site (OS) to find sufficient test subjects. It will be the basis for the Go/No-Go decision.

The definition of the sample size and selection criteria is part of the study plan and will not be discussed within this deliverable. The goal is to have a practical plan, how and when participants will be recruited.

1.3 Contents and structure of this Deliverable

This deliverable gives detailed information on the recruitment procedures as well as the time plan. It should serve as a manual for Operation Sites (OS) during the recruiting process.

Chapter 2 provides general information and guidelines on recruitment procedures and input from other Subprojects.

Possible recruitment methods as well as necessary precondition for recruitment will be presented in Chapter 3. In chapter 4 each OS will describe the practical implementation in its country.

1.4 This Deliverable in relation to the project structure

- D 31.1. gives an overview of the different operation Sites, their planning, roles, data quality procedures and legal issues and is closely related to the organisation of recruitment.
- D 12.1. study plan defines the sample size as well as the participant selection criteria and builds the framework for the recruiting process.

2 Recruitment procedures

2.1 General time plan and deadlines for recruitment procedures

Participants have to be recruited by 30 June 2014. OS Piloting starts in May 2014 and will be finished by 30 September 2014. Full vehicle operation starts in October and will be running until the end of project (Sept 2016).

2.2 Operation sites (OS)

The UDRIVE Operation Sites (OS) will manage all aspects of the project's data collection phase: from the recruitment of drivers/riders and vehicles (passenger cars, powered-two wheelers and trucks) to the transfer of the collected data to data centres.

Data collection will take place in seven EU Member States (Figure 1)

Figure 1. Operation Sites (OS)

2.3 Sample at each OS

Sample size and criteria were defined by WP 1.2. in D 12.1. Table 1 - Table 5 show selection criteria for each OS.

Table 1: Minimum requirements of participant characteristics

	Cars	PTWs	Trucks
Experience	10,000 km per annum	5,000 km per annum	N/A
Age	18-25; 30-65	18-25; 30-65	N/A
Gender	40% per gender	30% per gender	N/A
Multi-driver	6 cars with multi-drivers per age band; minimum 2 drivers per car.	N/A	N/A
Exposure	20% annual mileage in urban, rural and motorway environments respectively.	N/A	N/A

Table 2: Desired requirements of participant characteristics

	Cars	PTWs	Trucks
Experience	N/A	Ride all year around, with a minimum of 100 km per month	N/A
Age	N/A	N/A	N/A
Gender	Equal split between genders	N/A	N/A
Multi-driver	N/A	N/A	N/A
Exposure	N/A	Commuters exposing to both urban and rural environments	N/A

Table 3: Breakdown of fleet and sample sizes across OS

Type of vehicle	Country	Partner	Fleet size (number of DAS)	Number of participants
Car	France	CEESAR	30	50
	Germany	DLR	30	50
	Poland	IBDIM	30	50
	UK	UNIVLEEDS/LOUGHBOROU	30	50
PTW	Austria	KFV	15	15
	Spain	CIDAUT	25	25
Truck	Netherlands	TNO	50	50

Table 4: Breakdown of required number of vehicles at car OS

		18-25 years old	30-65 years old
Small cars	Male	Min 2	Min 2
	Female	Min 2	Min 2
	Minimum 6 multi-driver cars in each age band		
Mid-sized family cars	Male	Min 1	Min 1
	Female	Min 1	Min 1
	Minimum 6 multi-driver cars in each age band		

Table 5: Required number of vehicles at PTW OS

	Austria		Spain	
	18-25	30-65	18-25	30-65
Male	4	9	7	6
Female	1	1	6	6

2.4 Channels to reach the target group

Each Operation Site will describe in chapter 4 (Practical implementation at OS level) its plan to reach the target group. As the sample is different in each country (different vehicles, different drivers) the means will be different. Each OS describes the geographic region of recruitment[1], the estimated audience by means as well as the estimated response. Chapter 3 gives an overview of possible recruitment methods. Nevertheless each OS will decide on the best channels in its country.

2.5 Leaflet

WP 6.3 (see D 63.2) designed a leaflet which presents UDRIVE and its objectives (Figure 2). The leaflet is dedicated to informing stakeholders about the project and to facilitating recruitment in the Operation Site countries. It will be translated by FIA in the following languages: Dutch, French, German, Polish and Spanish.

The leaflet provides very good general information. However, for recruitment additional information could be necessary. Every OS is responsible for its own information letter (according to their target sample). An electronic version should support the recruitment via email or recruitment website.

The first information to the driver or fleet company should include:

- Context of the project (see leaflet D63.2)
- Goal/explanation of the project (see leaflet D63.2)
- Explanation of the Data Acquisition System (DAS)
- Expectations from the driver
- Compensation for the driver in general
- How to participate and contact
- Information that it is funded by the European Commission (see leaflet D63.2)
- All partner logos should be present (see leaflet D63.2).

[1] It is warmly recommended not having any participant more than an hour away. Previous experience shows that that maintenance of the DAS, change of hard disks and other personal contacts, e.g. for filling out questionnaires, turns very difficult if people are too far away. Although this could be overcome, there may be technical problems, which are difficult to solve if each trip is a hurdle.

Figure 2. UDRIVE leaflet (D 63.2)

2.6 Questionnaire for recruitment

The questionnaire for recruitment depends on certain inputs by WP 12 (study plan). It is needed to ensure the aforementioned participant selection criteria are met. As an example, the questionnaire depends on the required samples and has to collect respective information like gender and age. Annex A shows a draft version of the questionnaire.

Operation sites will translate the questionnaire and set up a local data base where interested people may apply. OS are free to choose whether to put the form on their website or if they prefer to let interested

people fill out hand written forms. However, it is strongly recommended having an online database, if all legal requirements about data protection are assured.

Following the legal recommendation from WP 1.3 the interested participant's data will be anonymised for the project.

2.7 Participant selection

OS will decide about participant selection according to the target sample defined by WP 12. It is important that participants get as soon as possible an answer by OS to avoid drop out at this stage.

It is strongly recommended to have a personal interview with each participant in advance of signing the contract. This should particularly be used to discover potential problems (like potential drop-out).

2.8 Participant agreement

A specimen of a participant agreement will be provided by WP 1.3. Local legal experts at each OS have to check and adapt the agreement according to national law and to translate it.

In some countries (depending on national laws) it may be necessary to have a participant meeting (briefing) before signing the agreement as well as a debriefing after the project.

2.9 Participant briefing

Operation Sites will describe how they will brief their participants after the installation of the DAS. Depending on further development in the project, technical and legal information has to be provided.

In particular, data protection is an issue to the participant briefing.

Before DAS installation a briefing should include the following points:

- Presentation of OS
- Presentation of the project
    - European project
    - Main goals
    - Partners
    - Different OS
- Methodology (Instrumentation, driving, data analysis)
- Present the experimental protocol
- Instrumentation of the VL (Present the DAS and installation)
- Legal and ethical aspects

- Contractual documents
- OS Engagement
- Driver rights
- Driver obligations
- Questionnaires
- Incentives
- Hotline

After DAS installation a briefing should include the following:

- OS engagements
- Driver obligations/rights
- Hotline
- Etc.

2.10 Incentive strategy

An incentive strategy will be provided by D3.1.1 and will be adapted by each OS and incorporated within the participant agreement.

Due to tax reasons, it might be necessary to pay the incentive by vouchers (depending on national legislation). In any case, it has to be addressed how incentives have to be considered in terms of income tax. Further, payment method has to be agreed with each participant.

However, OS are free how to spend the money available per participant. It is up to the OS, if they want to disburse a small initial payment. Nevertheless, the major share of the incentive should be paid after the experiment is finished, all questionnaires are filled out, all information is provided and the DAS is dismounted.

Operation sites also are free to pay a part of the incentive to other persons or organisation then the subjects in case the incentives for the subjects are respectively lowered and the recipients of the money have verifiably contributed to subject recruitment.

3 Potential recruitment methods

3.1 Preconditions

Before starting the recruitment, a couple of decisions have to be taken and material has to be available. Without this information and material it is impossible to start recruitment. Table 6 shows a general check list.

Table 6: Checklist for recruitment

Checklist	OS Check
Permission for data collection	✓
Participant contracts: legal adaptation to national law and translation	✓
Recruitment tool (online or forms)	✓
Briefing material in local language	✓
Service procedures (OS organisation, hotline)	✓
Incentive strategy (including local tax issues)	✓
Recruitment strategy	✓

3.1.1 Permission for data collection

The collection of data via the recruitment questionnaire, the collection of personal data among the participant and the collection of data within the field trials may have to be approved by a national data protection committee or a commission responsible for ethics in science. It should be taken into account, that this could be very time consuming and is crucial for the Go/NoGo decision. The website of the European Commission presents all national data protection authorities within the EU (http://ec.europa.eu/justice/data-protection/bodies/authorities/eu/index_en.htm#h2-1, as of 29.08.2013)

3.1.2 Forms and contracts

There will be two particular forms: A paper on “General Conditions for Test Use” and a “Participant Agreement”. The second one will have to be specifically adapted to the legal situation at each operation site and, as a matter of fact, both papers have to be translated to local language, preferably by an approved translator, who has respective experience in translation of legal texts. As an alternative, a less professional translation has to be approved by a lawyer before use.

3.1.3 Recruitment website

A recruitment website should be the backbone of any recruitment procedures. It should provide all necessary information that subjects might ask for. Further it should include a web-based questionnaire tool in order to collect relevant information from subjects as well as to select the appropriate ones at a later stage. Annex A shows a draft version of the questionnaire for the UDRIVE project.

The recruitment website could at a later stage also be used as a tool for keeping in touch with the subjects and avoid drop-outs.

Figure 3 provides an example of how to inform potential subjects. KFV, in addition to the contents proposed above, decided to give a short description of the association, in particular a very short version of the mission statement. KFV considered this crucial in terms of raising confidence and the impression of reliability and confidentiality. In second place, KFV describes the methodology. As the third point, KFV describes the purpose of the activity, i.e. improving road safety by deriving advanced measures from the result of this new methodology. Finally, there's a link to the recruitment questionnaire and contact information.

KFV's recruitment questionnaire is an application based on a Lotus Notes database. Lotus Notes also allows website design. The rest of KFV's website is designed with Typo3 software, this website automatically forwards to the Notes web questionnaire.

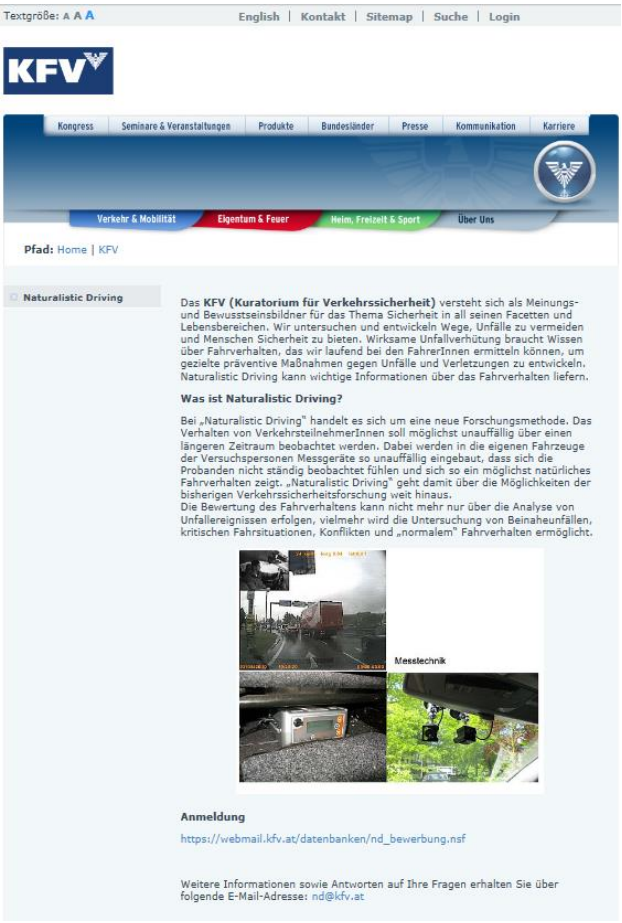

Figure 3. Example Recruitment Website: KFV's recruitement website for car drivers

([http://www.kfv.at/size2/kfv/naturalistic-driving/)](http://www.kfv.at/size2/kfv/naturalistic-driving/)

3.1.4 Vehicle Adaptation

Although this might not be a direct precondition, it is most likely that potential subjects ask for such information. Hence, there should be an almost final concept of vehicle adaptation (provided by WP 21 by 31.03.2014). Subjects have to be informed about the extent of adaptation and the pieces of technical equipment, which is built into their vehicles and what are potential risks, which remain – even if the utmost is done to avoid such risk. Another important issue is producer liability and warranty issues, which will be dealt with in SP2.

3.1.5 Service procedures

Procedures have to be set up, how to install the DAS in a car, what to do in case of malfunction, what to do in case of problems with the vehicle or simply to answer urgent questions by the subjects. It has to be clear, what will happen after de-installation, how the participant incentives will be paid and when. Further, the OS should be prepared for questions concerning taxation of incentives.

3.1 Recruitment methods

3.1.1 Own recruitment database

If an OS has experience with field experiments, it is most likely that they – in which format ever – already have a database or simple paper list of potential subjects. It may be the easiest way to recruit subjects to start by using this database.

3.1.2 Personal references

Many subjects can be recruited among the families, friends and neighbours of the employees of an OS. Scientific staff involved in UDRIVE project at the OS should not serve as subjects. Hence, the employees should be informed about the recruitment and respective frame conditions in order to be able to support the recruitment process. Emails, letters or phone calls to these groups may be sent informally, however, this process should be supported by respective information material.

3.1.3 Web-based recruitment

Depending on the sample of each OS there are a lot of different possibilities to advertise in the internet (partly for free). What is important for web-based recruitment is to know where you will find your target group. It is recommended to make an analysis of possible websites. Two examples will be described briefly:

- Age group oriented recruitment: Students' websites (adds are very often for free), seniors' association websites, …
- Vehicle oriented recruitment: For many vehicles, there are internet blogs, where vehicle owners exchange experiences, provide service and repair information or simply exchange their experiences. It is necessary to make good contact with the owners of these websites prior to placing recruitment messages, since the recruitment add might be considered a commercial activity and be deleted by the webmaster or moderator[2]. In particular motorcycle users tend to be members of such websites.

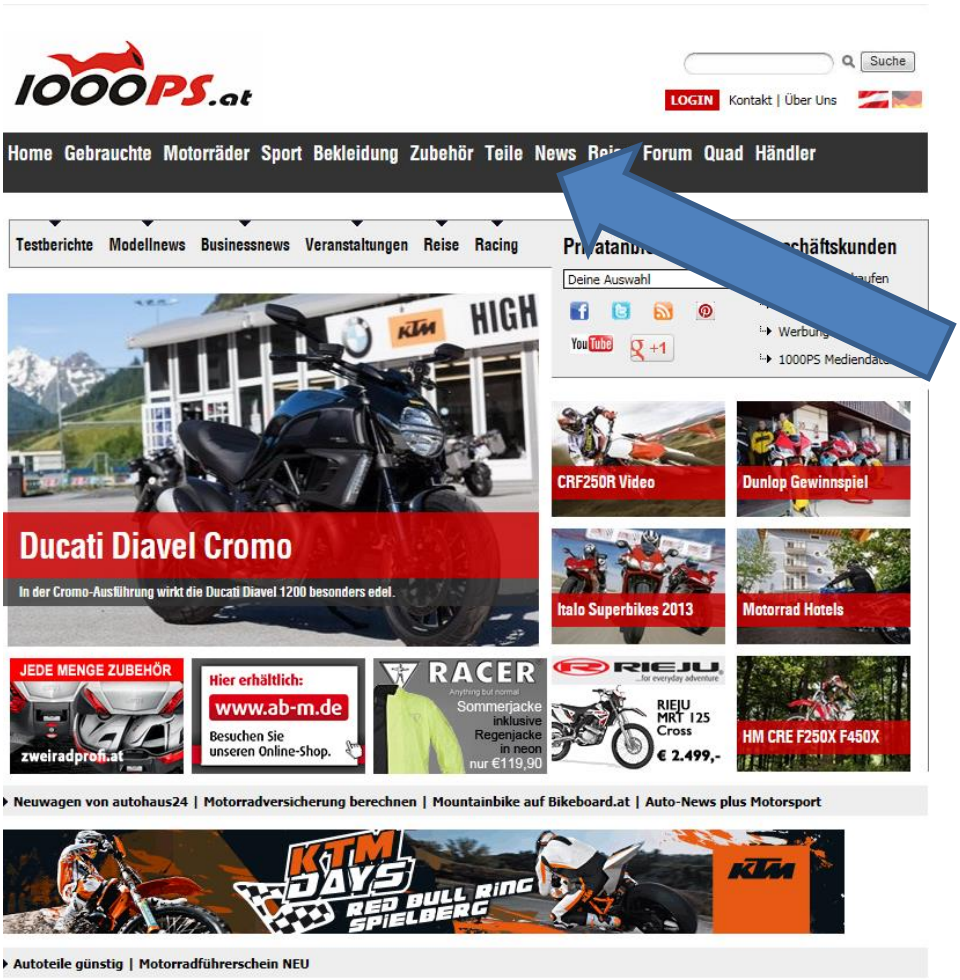

Figure 4. Website screenshot, platform for motorcycle enthusiasts www.1000PS.at

[2] From experience in collecting motorcycle riders for naturalistic riding, an advert was only presented for a couple of hours, but made some dozens of riders apply, before the advert was deleted by the webmaster (as it was considered a commercial activity, which was certainly not).

3.1.4 Driver and rider clubs

There are many organisations – clubs and associations – which serve as platform for bundling interests of their members and exchanging information. In particular motorcycle riders tend to be member of such clubs, but also for "usual" car, some clubs exist. It may also be the case that a make has e.g. a club for vintage car collectors of the same make, where enthusiasts meet who may easily be convinced of serving as subjects.[3]

3.1.5 Automobilist club

FIA has offered to support the recruitment via their local associations. Hence, at each OS the respective contacts have to be set up on time. Since data protection is an issue for such operations, legal conditions have to be checked and the procedures of contacting the members of the automobilist club have to be developed.

Normally, the automobilist club have journals they send to their members, which may be used for recruitment purposes. The respective add need to be designed.

3.1.6 Newspaper advert

As newspaper advertisements normally are expensive, an analysis of target group (demographic, geographic) and scope of the newspaper is recommended. Furthermore one should take into account, that the advert has to be designed.

[3] To provide an example, the "Erster Österreichischer Kleinwagen Club" (www.eokc.at) is an association of enthusiasts for small vintage cars and motorcycles.

As another example, at https://www.sgaf.de/ there is comprehensive information about the similar models Seat Alhambra, VW Sharan and Ford Galaxy. People exchange experiences about do-it-yourself repairs, acquisition of spare parts, experiences with workshops, or they simple exchange opinions about their vehicles, trips they have made, etc.

Figure 5. Example newspaper advert: KFV's add for car drivers

3.1.7 Recruitment agency

Some market research institutes also offer the possibility to recruit participants. This could be effective in case you look for very specific participants (e.g. elderly, …) but is probably also very cost-intensive.

3.1.8 Vehicle fleets

Contacting fleet operators is a useful way to save resources. There might be advantages like having to contact only one person for setting up all procedures, a common garage, a bunch of similar or equal vehicles, vehicles with multiple drivers, high mileage drivers, etc. Certainly, there are also shortcomings: The sample might be biased in various contexts.

FESTA handbook (FOT-Net, September 2011) describes some critical considerations and gives general advice concerning the recruitment of fleet drivers:

- Assume that there will be an attrition rate of about 10 to 15 % when using company employees, who come and go, and retire.
- Be aware that, when company employees change jobs within their companies, this may have a dramatic effect on their annual travel.
- If fleet drivers are recruited via a fleet owner or manager it is also necessary to get buy-in from individual drivers.

- With respect to safety, select drivers who do not pose a risk to themselves, others or the project. Be aware of the potential for bias in the results.
- Do not underestimate the complexities involved in recruiting company employees.
- Be aware that some commercial operations may have employee turn-over rates approaching 100 % per annum.
- The Ethical requirements for recruitment of users may be difficult to adhere to when recruiting company employees.
- Ideal companies to approach to recruit fleet vehicle drivers have the following characteristics: many vehicles; drivers have high mileage rates; drivers drive primarily in the geographical areas of interest of the study; and management has a commitment to the aims and objectives of the study.

3.1.9 Manufacturer

Manufacturers can help in finding subjects.

4 Practical implementation at OS level

4.1 Austrian Operation Site

4.1.1 General Description

Preparation work at Austrian OS (contract, data collection permission, recruitment website, clarification of service procedures) will be finished by the end of 2013, depending on input from other WPs (especially SP2 concerning DAS installation and warranty issues).

Recruitment process partly has already started in sense of informal contacts to possible test subjects. Intensive recruitment will start in the first half of 2014. A general information letter on the project as well as on what will be done with the vehicles of the participants will be sent out to potential test subjects as a first information. Participant briefing will be done in an informal setting. All rights and duties of test subjects have to be part of the participant agreement.

As Austrian OS is rather small (15 test subjects for 2 years), the organisationial requirements wont be a major challenge. There will be an assigned person for liaison with test subjects, who will be supported by an administrative person in charge.

KFV is in contact with a workshop for DAS (de-)installation. As soon as specification on how to install the DAS are provided by SP2 and warranty issues are clarified, KFV will fix the workshop.

Regarding the fact that DAS (de-)installation costs extra money and time, KFV intends to have a zero drop out rate. Therefore, the incentive-strategy is to pay the incentive after the whole project duration.

A recruitment web-site has already been set up and will be adapted to special needs of the projects.

4.1.2 Permission for data collection

General provisions in Austria

Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data is implemented in Austria through the Austrian Federal Act concerning the Protection of Personal Data [Datenschutzgesetz 2000 - DSG 2000, BGBl. I Nr. 165/1999].

The Austrian data protection commission (*Datenschutzkommission DSK,* www.dsk.gv.at) is a governmental authority charged with data protection. The data protection commissionn is the Austrian supervisory authority for data protection, the equivalent of a national data protection commissioner in other countries.

According to §46 par 2 DSG collection of **personal data** is possible, if the person concerned agrees. If sensitive, unanonymized data (= personal and sensitive data) is collected, permission from the Austrian data protection commission is necessary.

Sensitive data obtains information about a person's racial or ethnic parentage, political view, trade-union membership, religious and philosophical beliefs, health, or their sexual life. Furthermore, all categories of sensitive data have in common, that it is not important to represent the information content in plain language, but that it is adequate if the right category of information is put across through data. Moreover, the Austrian Federal Act concerning the Protection of Personal Data protects in a particular way data relating to offences (even suspicion), criminal convictions or security measures and prohibits the processing of data without permission. The use of data concerning acts and omissions punishable by the courts or administrative authorities, and in particular concerning suspected criminal offences, as well as data concerning criminal convictions and preventive measures infringes interests in secrecy deserving protection as a basic principle.

People involved in the project **Naturalistic Observation** can be test subjects, as well as passengers or as other vehicles that are recorded by an external video camera. If the pictures taken by the external cameras are not being edited to be irrecognizable or if passengers are being recorded without having their consent, a permission of the Austrian data protectio commission according to §46 DSG has to be obtained. This permission replaces the approval of the people concerned.

The accomplishment of Naturalistic Observation projects without the permission of the Austrian data protection commission hence is only permitted, if:

- the approval of the subjects is being obtained,
- passengers are not being recorded and
- the picture taken by the external cameras has been edited to be irrecognizable up to the point where no people or license tables can be identified.

Table 7: Overview data protection

Kind of data	Documents	Body (to ask approval)	Time to get the approval
Personal data – consent from subject is possible	• Consent form	Participant	x
Personal data – consent from subject is not possible (external video)	• Data security measures • Detailled information on which data is collected (subjective, objective data) • Detailled information on the project • Detailled information, who will have access to the data • Detailled information on the scientific purpose • Description of DAS, especially cameras • Duration for which the collected data may be stored	DSK (Austrian Commission for Data protection)	6 months
Personal data Sensitive data (including crimes)	• S. above	DSK (Austrian Commission for Data protection)	6 months

KFV – Naturalistic Observation Permission

To get legal permission for data collection KFV submitted relevant documents to Austrian data protection commission in January 2013. KFV expects an official decision at the beginning of 2014.

If sensitive data from test subjects will be collected a permission from DSK is absolutely necessary. This takes 6 months (or longer) and the result is uncertain. It depends on an evaluation of the relation between scientific purpose and infringement of personal data protection. As in D 1.31 Legal recommendation suggested KFV prefers not to collect sensitive data.

4.1.3 Forms and Contracts

As soon as all specifications concerning DAS, DAS-installation and warranty issues are clarified on a project-level, KFV will translate the consent form. For Austria some additional points will be necessary:

- In Austria participants are allowed to ask for deletion of data not only until handing over the hard disc to the project but whenever they want. KFV has to inform them about their right in the participant agreement, but in practice deletion is very rarely asked and if so during handing over at the latest.

- Particpants are very often interested in having a look into their own data, especially in cases, when they are fined by the police or they think another person didn't apply to the rules. In Austria this is not allowed and participants should be informed in the consent about that.

- As already mentioned concerning sensitive data, KFV prefers not to collect sensitive information from test subjects. If the study plan requires this information, permission has to be obtained. It officially takes 6 months (from previous experience up to 1 year).

Due to previous experience in Naturalistic studies KFV doesn't expect any issues concerning the contract. Translation and local adaption will be done in 2013.

4.1.4 Recruitment Methods & Procedures

Building on experience from previous projects, KFV plans to recruit subjects from as close as possible to its site in Vienna. Cooperation seems difficult in terms of repair and replacement of data storage as soon as subjects do not operate their vehicles in a distance less than half an hour away from your site (i.e. either place of living or work).

Figure 6. Recruitment site in Austria

Vienna is the Austrian capital with 1,8 Mio of inhabitants and an area of 440 km². Vienna has the longest network of tram worldwide and other public transport is very good, dense and cheap compared to other cities of comparable size. Vienna is always among the first three cities in international comparison of quality of living. This, among of other factors, is caused by the good public transport network and the relatively good conditions on roads compared to other cities.

Vienna, in all districts close to the city centre, has parking fees in place with a cost of 2 Euros per hour (between 9:00 and 22:00) and a maximum parking duration of two hours. PTW are excluded, i.e. with PTW parking is free.

Around the city of Vienna, there are some short mountainous routes, where PTW regularly go to ride their bikes just for fun – if they do. About 50 km away from the city, the typical weekend-routes of motorcycle riders are located, i.e. suitable mountainous regions with the kind of roads preferred by riders start there.

According to a representative Austrian opinion poll involving 1000 subjects, the most frequent activity of riders is for recreational purposes. About 20% of the riders use the motorcycle for commuting at least "often". Slightly less frequently go for holiday trips with the motorcycle. About 40% confess to go for sports rides "often" or "very often", but hardly any rider does that on race tracks. The most typical activity of a

recreational rider is going out on Saturday or Sunday morning around 10:00 a.m. and ride 200 to 300 km within this mountainous regions with 50 km additionally to reach these regions and another 50 km to go back home.

Motorcycling is a very seasonal activity in Austria (depending on the weather condition from March/April to October/November). Only 5% of the riders are riding the whole year.

The Austrian operation site has to recruit 15 riders. KFV has its own recruitment website and data base (see the examples in chapter 3). One person in charge administrates the subject database and serves as the general purpose contact point. All specific issues will be dealt with by colleagues, who are also members of the UDRIVE team. Within the current list, there is one rider with a suitable bike. There are some more KFV is in personal contact with.

In order to acquire more riders, KFV is planning the following activities:

1. KFV will contact motorcycle dealers in Vienna and ask for their support. Hopefully, they will approach all their customers (although this has been tested before with little success).
2. KFV will contact the administrator of an online platform for motorcycle enthusiasts (www.1000PS.at) and try to place an advertisement there
3. KFV has already contacted the journal “Reitwagen”, which is a typical PTW magazine holding a market share of about 85% in Austria. The editor in chief is an employee of KFV. There are good contacts and the issue was already discussed.
4. Track based perfection training is very common in Austria. There is an excellent cooperation between KFV and the market leader, which facilitates recruitment in these courses (which can be expected to be most efficient, but may induce a bias in terms of safety-related attitudes, hence, not all the subjects may be recruited this way).
5. The Austrian Automobilists Club ÖAMTC is, with respect to the size of the country, the largest in the world (about 1.5 Mio members). It is member of FIA. The second Automobilist Club ARBÖ with 400.000 members is still one of the larger associations of this kind worldwide. They have both volunteered to support recruitment. In addition, the Austrian association of dealers and manufacturers (and ACEM member) ARGE2rad has also volunteered to support recruitment. It is most likely that both clubs will issue recruitment ads in the monthly journals and on their websites.

There are some more channels that can be used for recruitment, but most likely the ones described above will be sufficient.

4.2 Dutch Operation Site

4.2.1 General Description

TNO has contacts with Volvo Netherlands, who will make connections with fleet-owners willing to participate in the project. TNO will send Volvo a short presentation on the project which they will present to possible participants. Before the end of October it is planned to receive the contacts from Volvo, in order to contact the fleet owners and to make agreements upon participation. The problems when actually recruiting participants will especially consider issues related to 'feelings of being controlled by the boss', when drivers are being filmed. Therefore it is of utmost importancy to stress the way TNO handles the data. For now Maartje de Goede (maartje.degoede@tno.nl) can be contacted in case of questions on this subject.

4.2.2 Permission for data collection

For what TNO knows now, they do not need official permission to start collecting data, as long as TNO has a documented protocol according to which TNO handles the data in terms of protection and privacy. Especially concerning the video data, TNO has to describe in detail how and how long the data will be kept (there is a maximum period for this, which TNO still has to find out).

Another issue TNO has to clarify is the case when an accident would happen and the police would ask TNO for the data (which can be done at all times in the Netherlands), while the driver (or his company) wants TNO to delete the data (which can be demanded by a participant at all times).

4.2.3 Forms and Contracts

Currently TNO is composing the following documents:

- Contract TNO – Fleet-owner
- Informed consent truck-drivers
- Contract TNO – producer DAS system
- Contract TNO – installer DAS system
- General Information letter participants (Truck drivers & Fleet owners)
- Privacy Protocol (data privacy)

TNO will have these documents checked by the legal department and finalized in the course of November.

- TNO does not want to have any responsibility concerning the safety (e.g.: interference with the driving tasks) of the DAS. Therefore a contract should be made between the producer of the DAS system and TNO that states that all responsibility lies with the producer. If this is not possible (not accepted by the producer), insurance issues should be checked.

4.2.4 Recruitment Methods & Procedures

See also 4.2.1. In case TNO doesn't get enough potential participants via Volvo (which is not considered very likely), TNO will approach other (large) fleet owners with whom TNO has contacts. In order to promote participation, the value of safe driving conditions and contribution to scientific research projects which make this possible, should be stressed. Promoting their contribution to knowledge development and safe traffic provides an incentive for companies to participate.

4.3 French Operation Site

4.3.1 General Description

OS piloting will start in March 2014 until end of September 2014. Full vehicle operation starts in October and will be running until the end of the project in September 2016. The selection of drivers is planned to be started in March 2014 until the end of June 2014.

Before starting the recruitment the following actions will be implemented at French OS:

- Permission for data collecton: Before piloting the data protection and video recording authorizations have to be obtained.
- Recruitment strategy : Thirty participants who own Renault Clio III, Renault Mégane III and will be recruited in the Southeast of France. CEESAR will use the database of private car owners which is available from Auxiliary Automotive Association (AAA) for the recruitment.
- Recruitment tool: Leaflets provided by WP 6.3 (see D63.2) will be used to approach potential participants. They will be contacted initially by post and then by phone.
- Hotline: CEESAR has planned to have always the same person contacting a driver in order to create a relationship of trust with him.
- Briefing material: The complete project will be presented (PPT presentation) before the signature of the contracts between OS and the vehicle owner/driver.
- Participants contracts: The contracts provided by WP1.3 will be adapted according to the French national law and translated.
- Incentive strategy : The amount of the incentive will be divided and the participants will receive their compensation on three times. The first payement will be made at the beginning of the operation, the second in the middle (after 9 months) and the last one at the end.

4.3.2 Permission for data collection

French OS has to undertake the following actions to get the permission for data collection:

- **Data protection**: In France the Act n°78-17 of January 6th, 1978 on Data Processing, Data Files and Individual Liberties[4], amended by the Act of March 25th, 2007 ensures the protection of individuals with regard to the processing of personal data. CNIL[5], the French National Commission for Data

[4] Loi 78-17 du 6 janvier 1978 relative à l'informatique, aux fichiers et aux libertés
[5] CNIL : Commission National de l'Informatique et des Libertés

protection, which is an independent French administrative authority, has a mission to ensure that data privacy law is applied to the collection, storage, and use of personal data.

CEESAR will notify the implementation of a file and its characteristics to the CNIL. In case of our project CEESAR will make an "authorization" request before the start of the experimentation. It will take three months to get the approval from the CNIL. CEESAR expects to get the permission before end of March 2014.

- **Video recording:** Legal aspects regarding people's image rights are largely based on the Article 9 of French Common Law[6]. The article 9 of the common law provides that "everyone has the right to have his/her private life respected".

  In case of video recording of the persons in specific context, people must be informed before that they will be filmed. A written consent form will be signed by the participants: "Authorization to record video".

  Regarding the legal aspects on the video surveillance, the article 10 of January 21st 1995 on orientation and security relative planning, applies only to the fixed cameras not to the moving cameras. In case of "video recording of third parties in public places", CEESAR needs to declare to the French National Commission for Data protection and the Liberties (CNIL) that there will be "video recording of the third parties in public place", and before each diffusion of the pictures, anything contributing to the identification of people (face, number plate…) will be blurred. If the pictures are recorded automatically in areas where video recording is prohibited, CEESAR will destroy the pictures concerned.

4.3.3 Forms and Contracts

For the French OS there will be three contracts: "Participant Agreement" (including the documents Description of naturalistic driving study and Participants guide), "General Conditions for Test Use" and the form "Authorization to record video".

The documents "Participant Agreement" and "General Conditions for Test Use" provided by WP1.3 will be adapted according to the French national law and translated, whereas the form "Authorization to record video" will be set up by CEESAR.

4.3.4 Recruitment Methods & Procedures

The recruitment will be done in Valence in Southeast of France.

[6] Article 9 of common law founded by the law 1803-03-08 promulgated 18 mars 1803, modified by the law 1927-08-10 Act. 13, modified by the law n°70-643 of 17 July 1970 - act. 22 JORF 19 July 1970, modified by the law n°94-653 of 29 July 1994 - act. 1 JORF 30 July 1994.

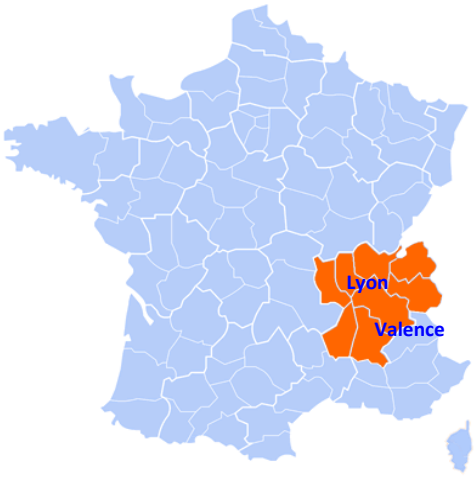

Figure 7: Recruitment site in France

To recruit participants CEESAR will use the database of private car owners through the Auxiliary Automotive Association, working with the CCFA-French Automotive Manufactures Council. This database contains the personal information on the potential participants such as name, address, age, brand, model and year of the vehicle. Previous studies showed that one have to contact 20 potential participants in order to get one.

The recruitment will be done in four steps:

- First, all potential participants will be contacted by post (letters of invitation and leaflets explaining the UDRIVE project will be sent).
- Then, CEESAR will call the potential participants to evaluate if the participant will correspond to the selection criteria (age, geographic region, vehicle brand and model,…). In such case CEESAR will suggest them to participate in the study.
- After that, recruitment meeting will be organized with the potential participants. During the meeting CEESAR will present the organizational and the contractual aspects and ensure that the participants get all the necessary information before the operation begins. Potential participants will also complete the recruitment questionnaire.
- Finally, based on recruitment questionnaires answers CEESAR will select the participants and call them to have their final approval.

If the recruitment method initially implemented at the French OS is not sufficient; CEESAR will extend to other cities around Valence to get the expected drivers.

4.4 German Operation Site

4.4.1 General Description

The German OS is located at the city of Braunschweig, in the middle north of Germany. With just under one million residents and connections to motorway and rail netwroks, the city of Braunchweig provides variety of traffic conditions to study drivers' behaviour. The German OS will follow the global time plan provided by D31.1. The plan include the following tasks:

- OS preparation and adaptation (July 2013 – July 2014)
- Participant recruitment (February 2014 – June 2014)
- Pilot DAS installation and OS piloting (April 2014 – July 2014)
- Installation of all DAS and commencement of trials (August 2014 – October 2014)

OS preparation and adaptation include: preparation of data protection concept, preparation of participant agreement, translation and printing of participant questionnaire and leaflet, assign a room with computer connected to internet and another room for participant briefing, create a website for participant recruitment, assign a contact person for participant.

Participant recruitment includes: finding participants with existing database and public announcements, contacting volunteer participant by phone, contact dealership of Renault in Germany for additional participants, perform participant questionnaire for recruitment, signing agreement with selected participants.

DAS installation and trial piloting include: receive DAS equipments, train technicians, installing DAS on participants' vehicles, conduct participant briefing, conduct OS piloting, piloting reporting and feedback.

The incentive was decided to be around 500 euros per person per year. However, since participants will drive 21 months, the total incentive per person will be 800 euros. The payment to participant will be divided into periods of 3-6 months (i.e. when changing hard disk). This is to keep the participant motivated during the whole period of data collection. It is the responsibility of the participant to report the incentive in their tax declaration.

4.4.2 Permission for data collection

DLR faced the same issue with an internal ND project, currently running at DLR. The procedure DLR followed was: first construct an expert board which consists of 1) data security commissioner for DLR (in German *Datenschutzbeauftragter*), 2) legal department at DLR, 3) external expert company, 4) responsible person from DLR on OS. Second, submit a data security concept to the expert board. The concept includes issues like: content of recorded data, schedule of project, who will have access to the data and when data will be deleted. Finally, approve the data security concept by DLR's institute leader. The process takes 4 month to 1 year. However, since DLR already has experience with it now, within UDRIVE the support from an external company will not be needed and the procedure is expected to be shorter in time (around 6 months).

Regarding ethical issues, in Germany there is no committee to apply for and it is DLR's own responsibility to comply with the rules.

4.4.3 Forms and Contracts

Currently DLR has a national project on naturalistic study, from which a lot of experience has been gained regarding participant agreement. The procedure will be to adapt the current participant agreement from the national project to UDRIVE project taking into account the recommendations provided by WP 1.3 **Error! eference source not found.** shows the time plan.

Table 8: Plan of participant agreement procedure at the German OS

Start date	End date	Task
Oct. 2013	Nov. 2013	consult DLR legal department on recommendation provided by WP 1.3
Nov. 2013	Jan 2014	Adapting participant agreement from national project to UDRIVE
Jan. 2014	Feb. 2014	Participant agreement ready for recruiting drivers

Most difficult issue that may arise is the need for anonymization software to anonymized high resolution outside video data including people faces and vehicles' license number. Such software has not been found yet. An alternative procedure that can be followed is to get an exceptional permission to use this data.

For the other forms, DLR will follow the agreed document for General Conditions for Test Use.

4.4.4 Recruitment Methods & Procedures

DLR has its own list of possible volunteer drivers for simulation studies. The list consists of around 800 drivers who have been acquired through, for example, advertisement on newspapers, information given to visitors on the public day at DLR etc. In case of a study, the drivers on the list are contacted by phone and the planned study is explained to them. However, for UDRIVE DLR already knows that the list will not be enough due to the limited number of drivers who own Renault vehicles. Other means that will be followed include: advertisement on newspapers or at Supermarket as well as contact dealership of Renault.

4.5 Polish Operation Site

4.5.1 General Description

The Polish OS is responsible for running a car trial including 30 vehicles and 50 participants. The test site in Poland covers the city of Warsaw with its Metropolitan area. For the Polish site all indispensable documents covering recruitment materials and recruitment procedure, as well as data collection and trial management protocols will be prepared in Polish.

The persons responsible for the Polish trial are:

Name	Company	telephone	Email	Responsibilities
Jacek MALASEK	Road and Bridge Research Institute	+4822 3900 202	jmalasek@ibdim.edu.pl	Overall resposniblity for the Polish trial.
Leszek KORNALEWSKI	Road and Bridge Research Institute	+4822 814 1073	lkornalewski@ibdim.edu.pl	Overall responsibiltiy for trial preperation and operation at the Warsaw site

The time plan and organising the OS recruitment will depend on the possibility of recruitment from the fleet drivers.

The person in charge for the liasion with the test subjects will be Mrs Katarzyna Goch (kgoch@ibdim edu.pl, +48 223 900 204)

Participant liaison will primarilly be reactive. The research team will not initiate communications with the participants unless necessary (e.g. no data are coming in while the participant has not advised being away on holiday) in order to minimse triggering unnatural behaviours.

A sheet of FAQ in Polish will be handed out to participants, which will contain key information for communication protocols, for example occasions when would the participants be requested to contact the OS (e.g. DAS maifunction) and occasions when the OS would contact the participants (e.g. swapping hard drives).

The participants will be requested to contact the research team if the vehicle will not be used for over a week (e.g. away on holiday or business trips, or illness). The research team will monitor data collectoin via the online monitoring tool provided by SP2, for both data quality as well as data collection progress (e.g. when the hard drives are due to be replaced).

4.5.2 Permission for data collection

The responsible authority in Poland is the Bureau of the Inspector General for the Protection of Personal Data (http://www.giodo.gov.pl/). The General Inspector for the Protection of Personal Data stated that currently in Poland there are no legal requirements for the monitoring.

4.5.3 Forms and Contracts

The translation of the participant agreement will be provided in December. The legal check will be provided by the Institutes' Legal Office. Both of the documents are related to the decision on method of recruitment.

Possible difficulties regarding law requirements and amendments to the participant agreement will be provided until the end of December.

4.5.4 Recruitment Methods & Procedures

Recruitment will cover area of Warsaw and Mazovia region. The contact point is the Road and Bridge Research Institute (Instytutowa 1, 03-302, Warsaw; +48 226 980 606).

Recruitment will primarily be conducted within Renault Poland fleet clients or by adverts in local newspapers which direct interested general public to a dedicated website where more detailed information will be offered (e.g. the required demographics as well as the vehicle make and models) and an invitation to complete the agreed recruitment questionnaire will be made. IBDIM will also get in contact with SAMAR institute (Polish pendant to French AAA), which has a database of private car owners. Drivers will be contacted directly with information letters or telephone calls.

Selection of potential participants will be made based on answers given in the recruitment questionnaire. Attention will be given to minimising potential drop-outs (e.g. likely to change vehicle, start a new job, or move home within the specified period), as no budget would be allowed for reinstallation of DAS on a replacement vehicle.

Selected participants will be invited to attend an information event where a detailed description of the field trials will be offered and questions/concerns clarified. Consent for participation will be sought. This procedure may be repeated until all 30 participants are secured.

There is an incentive budget of €800 (approx. 3300 PLN) per vehicle, regardless number of drivers attached. Cash payment will be made to participants. A preliminary payment schedule is at month 6, month 12 and month 21. A larger amount will be allocated to the final payment in order to incentivise participants' completion of the trial; e.g. 500 PLN at month 6, 800 PLN at month 12 and 2000 PLN at month 21. The participants will be requested to sign on a receipt upon receiving cash payment and advised that they are liable to declare the payments for income tax purposes.

Accredited and highly competent installers (from Renault authorized service workshops) will be appointed for DAS installation, when relevant installation instructions (translated in Polish if needed) are provided by SP2. Appropriate workshop space will be provided by the appointed installers. The installers will also be contracted to provide technical support during the trial (e.g. DAS malfunction).

Installation of DAS will be arranged upon receipt of signed participant agreement. Participants may be arranged in small batches for installation, depending on the installation duration.

4.6 Spanish Operation Site

4.6.1 General Description

- Valladolid naturalistic riding study will start in March 2014 running the piloting of in-vehicle DAS and the participant's pilot test. These tests will last three months and at least 2 participants will be involved. Data collected will be sent to the Central data centre to be checked for errors and analysed. Once, the procedures are validated and collected data checked Cidaut will implement all possible changes and/or improvements. Thus, the actual Naturalistic riding study will start on August 2014.
- From the organisational point of view, Cidaut has set a multidisciplinary team. There are two mechanical engineers, Alberto Senen Perez & Jairo Alija, who will be in charge of the DAS installation/de-installation, equipment maintenance and any other technical aspect. Depending on the complexity of the installation/de-installation process, this will be implemented by Cidaut electronics department leaded by Alberto Senen Perez or subcontracted to an official Piaggio garage. Recruitment process, the participant's briefings, and the questionnaires will be conducted by María Alonso & Oscar Martin with support from Cidaut's administrative personnel.
- Concerning the recruitment process, the main three tools that are going to be used are: Personal references, Riders clubs and official Piaggio garage. However, other tools (web-based or the newspaper add) will be used if needed during the recruitment process. The incentive strategy will consist of giving the participants half of the incentive at the beginning and the other half at the end after checking that the equipment and the data gathered are in good condition.

4.6.2 Permission for data collection

- From Cidaut's previous experience, in Spain it is enough if you comply with the Spanish data protection law and also register the database. However, to assure compliance with all legal aspects in this study Cidaut has contacted the Spanish data protection agency to explain in detail UDRIVE particularities so they can give Cidaut further instructions on how to proceed.

4.6.3 Forms and Contracts

- Once Cidaut receives an answer from the Data Protection agency it will translate the participant agreement and will forward it to its legal advisors. It is not expected to have any major difficulty or change anything substantial to the legal recommendations or the participant agreement.

4.6.4 Recruitment Methods & Procedures

- The operation site in Spain will be located in the area of Valladolid, a mid-sized city, located in Castilla y León region, in the North-West of Spain.

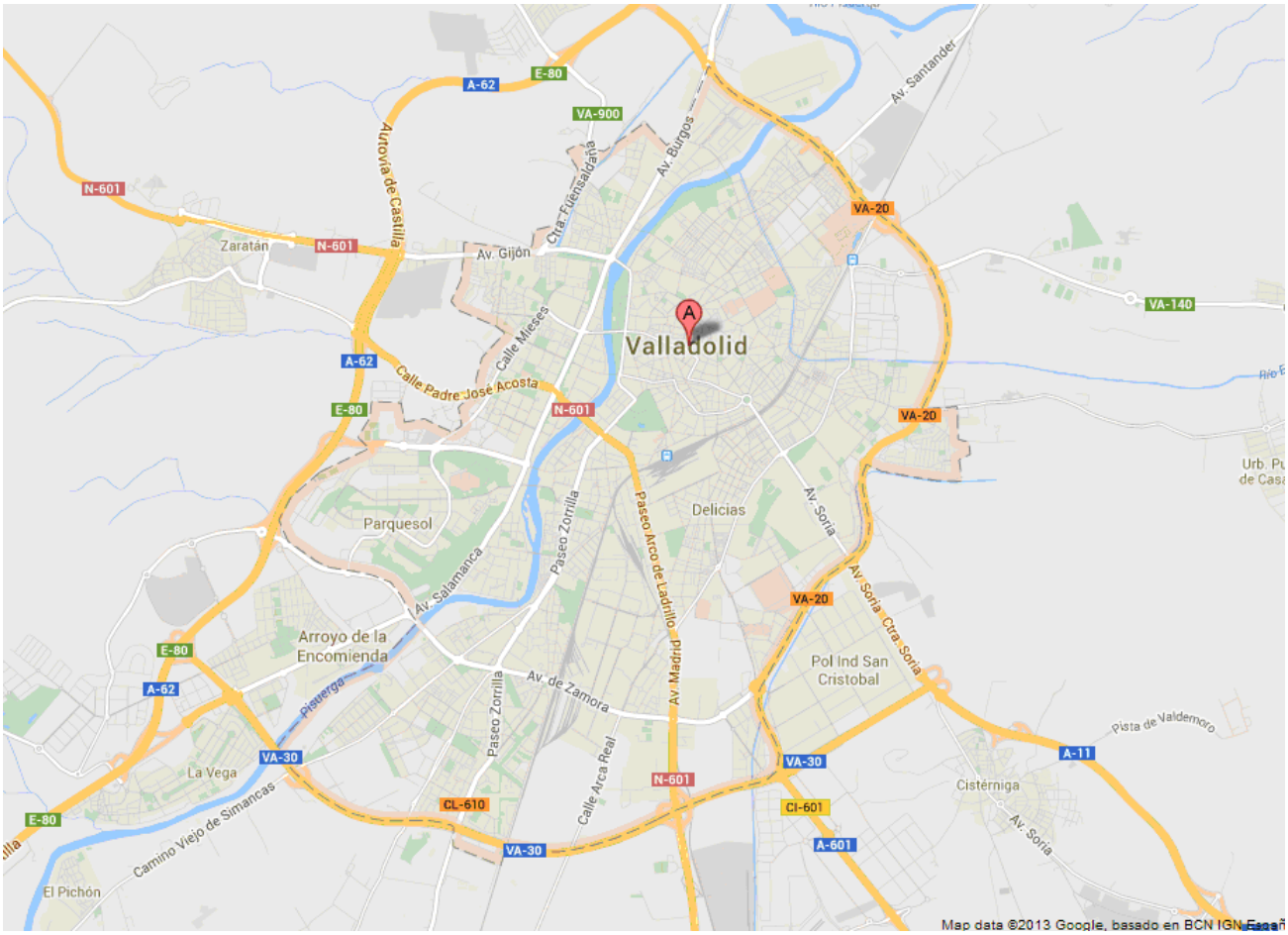

Figure 8: Recruitment site in Spain

The province of Valladolid has a population of 495,000 distributed in an area of 8,202 km2. It is characterised by the uniformity of its orography, mainly plain areas with small hills. The capital is Valladolid (city) with more than 319,000 inhabitants and located at 691 m of altitude.

The first approach of the recruitment process will be to announce the study and the recruitment process on the internal network and make it extensive to relatives and friends of Cidaut´s employees. At the same time the announcement will be published in at least two riders clubs. Cidaut will contact a local Piaggio garage/dealer and ask them to help on the recruitment procedure and if it is possible to facilitate potential participants. If Cidaut doesn't get enough participants using these methods, adverts will be published in the local press and in the internet.

4.7 UK Operation Sites

4.7.1 General Description

The UK Operation Sites consist of two distinct regions, Leeds and Loughborough, which respectively represent reletively large and small urban and rural environments. The same operational protocols will be followed by both sites. The required 30 drivers will be jointly recruited by both sites, according to the recruitment criterian specified in Section 2.3, but not necessarily equally split with respect to demographic variables and vehicle sizes between the two sites.

The UK OS will follow the agreed global timetable:

Start date	End date	Task
July 2013	July 2014	OS preparation and adaptation
Feb 2014	June 2014	Participant recruitment
May 2014	July 2014	OS piloting
August 2014	October 2014	Commencement of trials

The UK trial will be overseen by the following named persons. Detailed tasks will be delegated out to relevant colleagues at Leeds and Loughborough respectively.

Name	Company	Telephone	Email
Frank LAI	University of Leeds	+44-113-3436606	f.c.h.lai@its.leeds.ac.uk
Ruth WELSH	University of Loughborough	+44-1509-226937	r.h.welsh@lboro.ac.uk

A dedicated phone line, including an answering machine, and an email address will be set up as part of participant management. Events and system malfunctions will be recorded on an agreed log template.

4.7.2 Permission for data collection

Advice was sought from the Legal Advisor at the University of Leeds. The local authority for data protection is the UK's Office of Information Commissioner. A statement of justification for data collection and associated data management protocols would need to be submitted to the Office of Information Commissioner. This in particular concerns video and audio recording. Justification for video recording has to cover why the project requires filming of individuals and demonstrate that reasonable efforts will be made to minimise intrusion of privacy. It would be exceptionally challenging to record conversations but scrambled signals would be acceptable. No specific duration or deadline is expected. The Legal Advisor suggested that the Office of Information Commissioner may not necessarily comment on the protocols.

Ethical approval of relevant data collection, including video, vehicle data, and participant questionnaire, will be obtained from the Loughborough and Leeds Universities.

4.7.3 Forms and Contracts

The UK sites will follow the agreed recruitment documents, e.g. Participant Agreement, General Conditions for Test Use and Authorization to record video, from D13.1, as well as the agreed Participant Questionnaire.

4.7.4 Recruitment Methods & Procedures

Recruitment will primarily be conducted by adverts in local newspapers which direct interested general public to a dedicated website where more detailed information would be offered (e.g. the required demographics as well as the vehicle make and models) and an invitation to complete the agreed recruitment questionnaire will be made.

Selection of potential participants will be made based on answers given in the recruitment questionnaire. Attention will be given to minimising potential drop-outs (e.g. likely to change vehicle, start a new job, or move home within the specified period), as no budget would be allowed for reinstallation of DAS on a replacement vehicle.

Selected participants will be invited to attend an information event when a detailed description of the field trials will be offered and questions invited / concerns clarified. Consent for participation will be sought. This procedure may be repeated until all 30 participants are secured.

Previous experience suggests that the response level will strongly depend on incentives offered. The project decided to offer €800 per vehicle. Cash payment will be made to participants. A preliminary payment schedule is at month 6, month 12 and month 18. A larger amount will be allocated to the final payment in order to instentivise participants' completion of the trial. The participants will be advised that they are liable to declare the payments for income tax purposes.

Potential issues with participants' car insurance will need to be agreed within the project; e.g. participants are liable to declaring vehicle modifications to their insurers which might in turn affect their premium.

Creditable installers will be sought once the finalised DAS installation instructions are available and liability issues are agreed within the project.

Installation of DAS will be arranged upon receipt of signed participant agreement. A member from the research team will greet the participants at the designated workshop, go through the briefing procedure (including their responsibility of notifying passengers regarding relevant data collection activities), as well as collect required subjective data via the Participant Questionnaire.

5 Conclusions

In this deliverable general guidelines and preconditions for recruitment were specified. Due to the fact, that the target sample is different in each country, every OS described its recruitment strategy and how it is planned to reach out a sufficient number of possible participants. OS defined the geographic region of recruitment as well as means to recruit test subjects and legal issues regarding recruitment. Table 9 provides an overview. Furthermore, procedures how to contract test subjects were presented (briefing, contract, consent forms, incentive strategy...). In general OS have a clear plan what they have to do to recruit sufficient participants.

Nevertheless, before starting recruitment some further details from other WPs are needed (Table 10):

Table 9: Overview OS

OS	Geographic area	Means of Recruitment	Ethical/legal allowance (status)
Austria	Vienna	• Piaggio dealers • Manufacturer • Web-based recruitment • Automobilist clubs	• Permission for collecting ND Data (including 3rd persons outside the car) is needed. • Sensitive data (including driver offences) should not be collected • International transfer of personal data: permission still pending.
The Netherlands	The Netherlands	• Manufacturer (Volvo) • Contacts to fleet owner	• Official permission for data collection is not expected to be needed; Privacy protocol is sufficient • Legal issues in case of accidents will be clarified
France	Valence	• Database of private car-owner (AAA) • Letter of invitation • Phone calls • Manufacturers	• Permission for data collection has to be obtained • It is important to have all the relevant project information as soon as possible. Approval needs 3 months.
Germany	Germany	• DLR test subject database • Public announcements • Manufacturers	• Permission for data collection is needed from an expert board. Duration around 6 months. • In case external video can't be anonymised, an exceptional permission has to be obtained.
Poland	Poland	• Recruitment of fleet drivers • Manufacturers • Database of private car-owner (AAA)	• No legal requirements concerning data collection
Spain	Valladolid	• Internal network • Riders clubs • Piaggio garage/dealer • Contacts to manufacturer • Adverts in local press and internet	• Official permission for data collection is not expected to be needed, recheck with local authority: pending.
UK	Leeds, Loughborough	• Adverts local newspapers	• Statement of justification from the office of Information Commissioner for data collection is needed. No specific duration

Table 10: Information needed from other SPs

Topic	Needed for	Needed from	When
• Producer liability and warranty	• Participant agreement • In case of vehicle modification: influence on test participants vehicles insurance	SP2	Asap, December 2013 at the latest
• DAS (de-)installation: effects on the vehicle – general information on what is done with participants' vehicles • DAS (de-)installation: what kind of knowledge (workshop) is needed.	• Participant agreement • OS preparation: workshop	SP2	Asap, Dec 2013 at the latest
• (Sensitive) Data collected from participants: e.g. questionnaire, participant interview at the beginning and at the end of trials (on item level in case of sensitive data), but also DAS-data collected (if not already provided)	• Participant agreement (duties of participant) • Allowance from data protection commission (in case of sensitive data)	SP1	December 2013
• Specification of storage device (1GB, 1TB, …) • Specification of video resolution (how much storage space is needed for 1 hour of vehicle-driving)	• Storage device acquisition • Participant agreement (time interval of change)	SP2	December 2013 at the latest

6 References

FOT-Net. (September 2011). *FESTA handbook: Version 4, Annex B.* http://www.its.leeds.ac.uk/C13071AA-BAC1-48E4-98DD-74AE1E01AEDF/FinalDownload/DownloadId-F981B2EB4F4C2964DB61258A80942254/C13071AA-BAC1-48E4-98DD-74AE1E01AEDF/festa/downloads/FESTA_Handbook_V4.pdf.

7 List of Abbreviations

AAA	Auxiliary Automotive Association
Asap	As soon as possible
FIA	Federation international de l'Automobile
D	Deliverable
DAS	Data Acquisition System
ND	Naturalistic Driving
OS	Operation Site
PTW	Powered-Two Wheelers
SP	Sub project
UDRIVE	eUropean naturalistic Driving and riding for Infrastructure and Vehicle safety and Environment
VCC	Volvo Car Corporation
WP	Work package

8 List of Figures

9 List of Tables

Annex A: Recruiting questionnaire (Draft)

VEHICLE	
vehicle BRAND	eg Renault
Vehicle MODEL	eg Clio
Version	eg 3
Variant	eg Dynamique
Date of first registration	DD/MM/YYYY
Type of Fuel	
Engine size/Cylinder capacity (cc)	eg 1,5liter/1500cc
Engine power (Horsepower)	eg 105 HP
VIN/Chassis/Frame No.	
Gearbox	Manuel
VEHICLE OWNER	
Title	.
Forename	
Surname	
Address	
Telephone	
Mobile	
Email	
Estimated yearly mileage of the car	.
How many different drivers do normally drive this car ?	
Will you still have this vehicle in 2 years?	.
If not, why?	
Would you allow us to install data acquisition systems (as described) in your car ?	.
Is the designated vehicle has been modified (eg Hi End Audio system, Alarm,...)?	.
If Yes, describe the aftermarket equipment(s)	
Comments	
CONTACT DETAILS (Driver 1)	
Are you the owner of the vehicle ?	.
if yes , do not fill in this part	
Title	.
Forename	
Surname	
Home address	
Work address	
Telephone	
Mobile	
Email	
ABOUT YOU	
How old are you?	
What is your employment status?	.
WEEKLY HABITS	
Estimated weekly mileage using this car:	.
Driving to and from work	*km*
Driving for work	*Km*
Driving for private purposes (e.g. Bring children to school, Shopping, Leisure...)	*Km*
How often do you drive in the situations listed below:	
On highways	.
On rural roads	.
In town	.
EXCEPTIONNAL USES	
Do you drive the designated car for exceptionnal purposes (e.g. Vacations)	.
Estimated yearly mileage using this car for exceptionnal purposes	Km
OVERALL	
Estimated yearly mileage of your driving with the designated car	Km
CHANGES	
Will youdefinitely still drive the vehicle in 18 months ?	Yes/No
If no, please precise when and why you might stop using the vehicle	
Do you think that the driving habits you just described are likely to change in	Yes/No
If yes, please describe how and why	

CONTACT DETAILS (Driver 2)	
Title	.
Forename	
Surname	
Home address	
Work address	
Telephone	
Mobile	
Email	
ABOUT YOU	
How old are you?	
What is your employment status?	.
WEEKLY HABITS	
Estimated weekly mileage using this car:	.
Driving to and from work	*km*
Driving for work	*Km*
Driving for private purposes (e.g. Bring children to school, Shopping, Leisure...)	*Km*
How often do you drive in the situations listed below:	
On highways	.
On rural roads	.
In town	.
EXCEPTIONNAL USES	
Do you drive the designated car for exceptionnal purposes (e.g. Vacations)	.
Estimated yearly mileage using this car for exceptionnal purposes	Km
OVERALL	
Estimated yearly mileage of your driving with the designated car	Km
CHANGES	
Will youdefinitely still drive the vehicle in 18 months ?	Yes/No
If no, please precise when and why you might stop using the vehicle	
Do you think that the driving habits you just described are likely to change in the n	Yes/No
If yes, please describe how and why	

Figure 9. Draft Recruitment Questionnaire (as of 6 August2013)